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** SS 1: Results 1

Search statement 2

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1/1 PLUSPAT - (C) QUESTEL-ORBIT

PN - US5966286 A 19991012 [US5966286]

TI - (A) Cooling system for thin profile electronic and computer devices

PA - (A) INTEL CORP (US)

PAO - Intel Corporation, Santa Clara CA [US]

IN - (A) ADAMS DANIEL THOMAS (US); KAST MICHAEL ANDREW (US); BHATIA RAKESH (US); HALEY KEVIN (US); O'CONNOR MICHAEL (US)

AP - US65885696 19960531 [1996US-0658856]

PR - US65885696 19960531 [1996US-0658856]

IC - (A) H05K-007/20

EC - G06F-001/20P

- H05K-007/20B2B

PCL - ORIGINAL (O): 361699000; CROSS-REFERENCE (X): 165080300 165104330 361687000 438106000

DT - Corresponding document

CT - US4595338; US4706739; US4780062; US5008582; US5089935; US5267122; US5339214; US5383340; US5430609; US5494098; US5513070; US5598320; US5615084; US5646824; EP572326 A2; JP451994; JP5-259673

STG - (A) United States patent

AB - An apparatus and method for removing heat from a heat generating component located within a thin-profile consumer electronic or computer system enclosure is disclosed. In one embodiment the cooling system of the present invention includes an air duct comprising a thermally conductive housing having internal fins dispersed along the internal walls of the duct. An air flow generator produces an air flow that is directed from an inlet port located at or near the center of the air duct to first and second exit ports located at opposite ends of the duct. A low resistance thermal path, such as a heat pipe, transfers heat from the heat generating component to the air duct housing.

1/1 LGST - (C) LEGSTAT

PN - US 5966286 [US5966286]

AP - US 658856/96 19960531 [1996US-0658856]

DT - US-P

ACT - 19960531 US/AE-A

APPLICATION DATA (PATENT)

{US 658856/96 19960531 [1996US-0658856]}

- 19960531 US/AS02

ASSIGNMENT OF ASSIGNOR'S INTEREST

09/976912 INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA, CALIFORNIA 95052 * O'CONNOR, MICHAEL : 19960531; ADAMS, DANIEL THOMAS : 19960531; KAST, MICHAEL ANDREW: 19960531 - 19960812 US/AS02 ASSIGNMENT OF ASSIGNOR'S INTEREST INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA, CALIFORNIA 95052 * O'CONNOR, MICHAEL : 19960730; HALEY, KEVIN : 19960806; BHATIA, RAKESH : 19960730 - 19991012 US/A PATENT - 20021203 US/RF REISSUE APPLICATION FILED 20020514 UP - 2002-50 1/1 CRXX - (C) CLAIMS/RRX AN - 3216154 PN - 5,966,286 A 19991012 [US5966286] PA - Intel Corp - E (Electrical) ACT - 20020514 REISSUE REQUESTED ISSUE DATE OF O.G.: 20021203 REISSUE REQUEST NUMBER: 09/976912 EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2835 Reissue Patent Number: UP - 2002-49 UACT- 2002-12-03 Search statement ?file inpadoc Selected file: INPADOC You are now connected to INPADOC Covers 1968/1973 thru weekly updates (2003-14) For information on content, (..) INFO INPD. Search statement 1 ?fam us5966286/pn 1 Patent Groups ** SS 1: Results 5 Search statement ?famstate nonstop 1/5 INPADOC - (C) INPADOC PN - AU 29999/97 Al 19980105 [AU9729999] TI - COOLING SYSTEM FOR THIN PROFILE ELECTRONIC AND COMPUTER DEVICES

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IN - O'CONNOR MICHAEL; HALEY KEVIN; BHATIA RAKESH; ADAMS DANIEL THOMAS;
     KAST MICHAEL ANDREW
PA - INTEL CORP
AP - AU 29999/97-A 19970506 [1997AU-0029999]
PR - US 658856/96-A 19960531 [1996US-0658856]
    - WO 9707788/97(US)-W 19970506 [1997WO-US07788]
IC - H05K-007/20
2/5 INPADOC - (C) INPADOC
PN - AU 77269/96 A1 19980105 [AU9677269]
TI - COOLING SYSTEM FOR THIN PROFILE COMPUTER ELECTRONICS
IN - O'CONNOR MICHAEL; HALEY KEVIN; BHATIA RAKESH; ADAMS DANIEL T; KAST
     MICHAEL A
PA - INTEL CORP
AP - AU 77269/96-A 19961114 [1996AU-0077269]
PR - US 658856/96-A 19960531 [1996US-0658856]
    - WO 9618075/96(US)-W 19961114 [1996WO-US18075]
IC - H05K-007/20
3/5 INPADOC - (C) INPADOC
PN - US 5966286 A 19991012 [US5966286]
    - COOLING SYSTEM FOR THIN PROFILE ELECTRONIC AND COMPUTER DEVICES
IN - O'CONNOR MICHAEL [US]; HALEY KEVIN [US]; BHATIA RAKESH [US]; ADAMS
      DANIEL THOMAS [US]; KAST MICHAEL ANDREW [US]
   - INTEL CORP [US]
AP - US 658856/96-A 19960531 [1996US-0658856]
PR - US 658856/96-A 19960531 [1996US-0658856]
IC - H05K-007/20
1/1 LEGALI - (C) LEGSTAT
PN - US 5966286 [US5966286]
AP - US 658856/96 19960531 [1996US-0658856]
DT - US-P
ACTE- 19960531 US/AE-A
     APPLICATION DATA (PATENT)
      {US 658856/96 19960531 [1996US-0658856]}
    - 19960531 US/AS02
     ASSIGNMENT OF ASSIGNOR'S INTEREST
      INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA, CALIFORNIA
      95052 * O'CONNOR, MICHAEL : 19960531; ADAMS, DANIEL THOMAS : 19960531;
     KAST, MICHAEL ANDREW: 19960531
    - 19960812 US/AS02
     ASSIGNMENT OF ASSIGNOR'S INTEREST
      INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA, CALIFORNIA
      95052 * O'CONNOR, MICHAEL : 19960730; HALEY, KEVIN : 19960806; BHATIA,
     RAKESH : 19960730
    - 19991012 US/A
      PATENT
    - 20021203 US/RF
      REISSUE APPLICATION FILED
      20020514
UP - 2002-50
4/5 INPADOC - (C) INPADOC
PN - WO 9746067 A1 19971204 [WO9746067]
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TI - COOLING SYSTEM FOR THIN PROFILE COMPUTER ELECTRONICS
LA - ENG
IN - O'CONNOR MICHAEL [US]; HALEY KEVIN [US]; BHATIA RAKESH [US]; ADAMS
     DANIEL T [US]; KAST MICHAEL A [US]
   - INTEL CORP [US]; CONNOR MICHAEL O [US]; HALEY KEVIN [US]; BHATIA
     RAKESH [US]; ADAMS DANIEL T [US]; KAST MICHAEL A [US]
             9618075/96(US)-A 19961114 [1996WO-US18075]
PR - US 658856/96-A 19960531 [1996US-0658856]
IC - H05K - 007/20
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PN - WO 9746067 [WO9746067]
   - WO 9618075/96(US) 19961114 [1996WO-US18075]
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DT - WO-P
ACTE- 19961114 WO/AE-A
     APPLICATION DATA
      {WO 9618075/96(US) 19961114 [1996WO-US18075]}
    - 19971204 WO/AK-A1 [+]
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     APPLICATION WITH SEARCH REPORT
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    - 19971204 WO/A1 [+]
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   - 19980205 WO/DFPE
     REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH
     MONTH FROM PRIORITY DATE
   - 19980325 WO/121
     EP: PCT APP. ART. 158 (1)
    - 19990305 WO/NENP
     NON-ENTRY INTO THE NATIONAL PHASE IN:
     JP 97542296
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    - 19990401 WO/REG; DE/8642 [-]
     DE: IMPACT ABOLISHED FOR DE
    - 19990922 WO/122
     EP: PCT APP. NOT ENT. EUROP. PHASE
    - 19991130 WO/NENP
     NON-ENTRY INTO THE NATIONAL PHASE IN:
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5/5 INPADOC - (C) INPADOC

<CA>UP - 2000-02

- PN WO 9746068 A1 19971204 [WO9746068]
- TI COOLING SYSTEM FOR THIN PROFILE ELECTRONIC AND COMPUTER DEVICES
- LA ENG
- PA INTEL CORP [US]; CONNOR MICHAEL O [US]; HALEY KEVIN [US]; BHATIA RAKESH [US]; ADAMS DANIEL THOMAS [US]; KAST MICHAEL ANDREW [US]
- AP WO US 9707788/97(US)-A 19970506 [1997WO-US07788]
- PR US 658856/96-A 19960531 [1996US-0658856]
- IC H05K-007/20
- DS AL* AM* AT* AT* AU* AZ* BA* BB* BG* BR* BY* CA* CH* CN* CU* CZ* CZ* DE* DE* DK* DK* EE* EE* ES* FI* FI* GB* GE* GH* HU* IL* IS* JP* KE* KG* KP* KR* KZ* LC* LK* LR* LS* LT* LU* LV* MD* MG* MK* MN* MW* MX* NO* NZ* PL* PT* RO* RU* SD* SE* SG* SI* SK* SK* TJ* TM* TR* TT* UA* UG* US* UZ* VN* YU* AM* AZ* BY* KG* KZ* MD* RU* TJ* TM* GH KE LS MW SD SZ UG AT BE CH DE DK ES FI FR GB GR IE

1/1 LEGALI - (C) LEGSTAT

PN - WO 9746068 [WO9746068]

AP - WO 9707788/97(US) 19970506 [1997WO-US07788]

DT - WO-P

ACTE- 19970506 WO/AE-A APPLICATION DATA

(WO 9707788/97(US) 19970506 [1997WO-US07788])

- 19971204 WO/AK-A1 [+]
 - DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT AL AM AT AT AU AZ BA BB BG BR BY CA CH CN CU CZ CZ DE DE DK DK EE EE ES FI FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SK TJ TM TR TT UA UG US UZ VN YU AM AZ BY KG KZ MD RU TJ TM
- 19971204 WO/AL-A1 [+]
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- 19971204 WO/A1 [+]
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- 19980325 WO/121
 - EP: PCT APP. ART. 158 (1)
- 19980520 WO/122
 - EP: PCT APP. NOT ENT. EUROP. PHASE
- 19980924 WO/REG; DE/8642 [-] DE: WITHDRAWAL
 - <DE>
- 19990131 WO/NENP
 - NON-ENTRY INTO THE NATIONAL PHASE IN:

CA

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UP - 1999-18



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Terms: patno=5966286 (Edit Search)

658856 (08) 5966286 October 12, 1999

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT **5966286**

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Link to Claims Section

October 12, 1999

Cooling system for thin profile electronic and computer devices **REISSUE:** May 14, 2002 - Reissue Application filed Ex. Gp.: 2835; Re. S.N. 09/976,912 (O.G. December 3, 2002)

INVENTOR: O'Connor, Michael, Cupertino, CA; Haley, Kevin, San Jose, CA; Bhatia, Rakesh, San Jose, CA; Adams, Daniel Thomas, Menlo Park, CA; Kast, Michael Andrew, Palo Alto, CA

APPL-NO: 658856 (08)

FILED-DATE: May 31, 1996

GRANTED-DATE: October 12, 1999

ASSIGNEE-AT-ISSUE: Intel Corporation, Santa Clara, CA

ASSIGNEE-AFTER-ISSUE: August 12, 1996 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA CALIFORNIA 95052, Reel and Frame Number: 008076/0001 May 31, 1996 - ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)., INTEL CORPORATION 2200 MISSION COLLEGE BLVD. SANTA CLARA CALIFORNIA 95052, Reel and Frame Number: 008127/0385

LEGAL-REP: Blakely, Sokoloff, Taylor & Zafman LLP

PUB-TYPE: October 12, 1999 - Utility Patent having no previously published pre-grant publication (A)

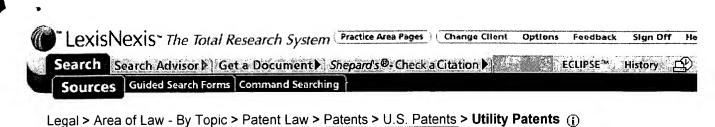
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US-MAIN-CL: 361#699

US-ADDL-CL: 165#803, 165#104.33, 361#687, 438#106

CL: 361, 165, 361, 438

SEARCH-FLD: 165#803, 165#104.33, 165#804, 165#185, 165#104.21-10426, 165#104.29, 257#712, 257#713, 174#152, 174#163, 622#592, 364#708.1, 298#32, 298#41, 298#54, 297#29, 297#39, 297#40, 361#687, 361#694.-703, 361#701,



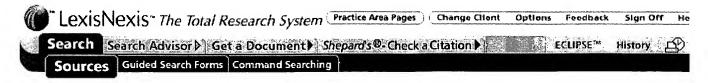
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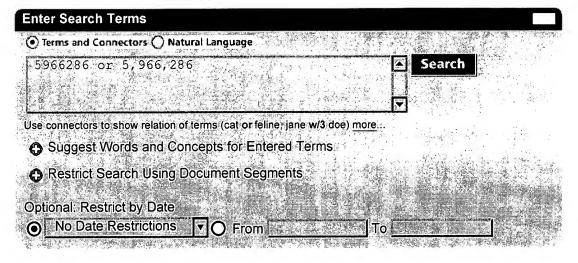
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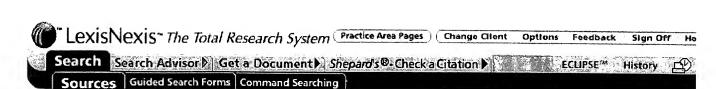
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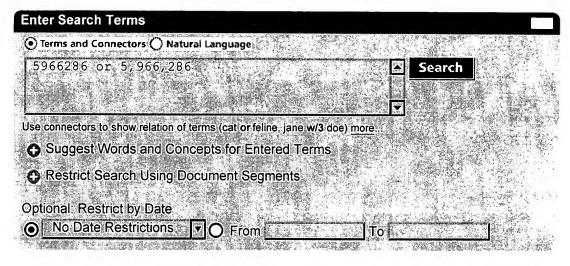


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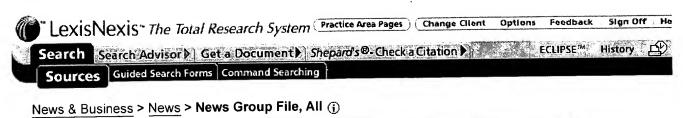
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